

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

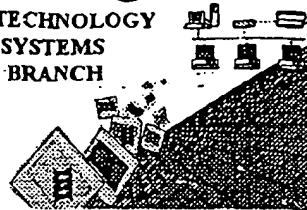
- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/721,997
Source: EFS-BIO
Date Processed by STIC: 12/10/03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to (EFFECTIVE 12/01/03):
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFW0

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003

TIME: 17:34:11

Input Set : A:\Sequence Listing A66.txt

Output Set: N:\CRF4\12112003\J721997.raw

3 <110> APPLICANT: Aventis Behring GmbH
 5 <120> TITLE OF INVENTION: Modified cDNA Factor VIII and its Derivatives
 7 <130> FILE REFERENCE: A66
 > 9 <140> CURRENT APPLICATION NUMBER: US/10/721,997
 > 9 <141> CURRENT FILING DATE: 2003-11-26
 9 <160> NUMBER OF SEQ ID NOS: 34
 11 <170> SOFTWARE: PatentIn version 3.1
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 34
 15 <212> TYPE: DNA
 16 <213> ORGANISM: Artificial
 > 18 <220> FEATURE:
 > 18 <223> OTHER INFORMATION:
 > 18 <400> 1
 19 ggaaccatcg ccagaagtcc ttggaaatct cgcc
 22 <210> SEQ ID NO: 2
 23 <211> LENGTH: 34
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Artificial
 > 27 <220> FEATURE:
 > 27 <223> OTHER INFORMATION:
 > 27 <400> 2
 28 ggcgagattt ccaaggactt ctggcgatgg ttcc
 31 <210> SEQ ID NO: 3
 32 <211> LENGTH: 32
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Artificial
 > 36 <220> FEATURE:
 > 36 <223> OTHER INFORMATION:
 > 36 <400> 3
 37 ccaccaaca tggatggcatg gaagcttatg tc
 40 <210> SEQ ID NO: 4
 41 <211> LENGTH: 32
 42 <212> TYPE: DNA
 43 <213> ORGANISM: Artificial
 > 45 <220> FEATURE:
 > 45 <223> OTHER INFORMATION:
 > 45 <400> 4
 46 gacataagct tccatgccac catgttggtg gg
 49 <210> SEQ ID NO: 5
 50 <211> LENGTH: 47
 51 <212> TYPE: DNA
 52 <213> ORGANISM: Artificial

Insert this mandatory numeric identifier whenever 2227, 2227, or 2237 is shown. See pg. 6 for error explanation.

Please insert Response for Section 2237 if Artificial Sequence on Genus/species.

Does Not Comply Corrected Diskette Needed

per 1.823 of New sequence rules. Please see error explanation pg. 6.

Same errors

Same errors

Same errors

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003
TIME: 17:34:11

Input Set : A:\Sequence Listing A66.txt
Output Set: N:\CRF4\12112003\J721997.raw

> 54 <220> FEATURE: ← Same errors
> 54 <223> OTHER INFORMATION: ←
> 54 <400> 5
55 cagaggaacc ccaactacga cgtaaaaata atgaagaagc ggaagac 47
58 <210> SEQ ID NO: 6
59 <211> LENGTH: 47
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial
> 63 <220> FEATURE: ← Same errors
> 63 <223> OTHER INFORMATION: ←
> 63 <400> 6
64 gtcttcgct tcttcattat ttttacgtcg tagttggggg tctctcg 47
67 <210> SEQ ID NO: 7
68 <211> LENGTH: 42
69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial
> 72 <220> FEATURE: ← Same errors
> 72 <223> OTHER INFORMATION: ←
> 72 <400> 7
73 cccaactacg aatgaaaaat gatgaagaag cggaagacta tg 42
76 <210> SEQ ID NO: 8
77 <211> LENGTH: 42
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial
> 81 <220> FEATURE: ← Same errors
> 81 <223> OTHER INFORMATION: ←
> 81 <400> 8
82 catagtcttc cgcttcttca tcatttttca ttcgtagttg gg 42
85 <210> SEQ ID NO: 9
86 <211> LENGTH: 40
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial
> 90 <220> FEATURE: ← Same errors
> 90 <223> OTHER INFORMATION: ←
> 90 <400> 9
91 gaagaagcgg aagactatga tgataatctt actgattctg 40
94 <210> SEQ ID NO: 10
95 <211> LENGTH: 40
96 <212> TYPE: DNA
97 <213> ORGANISM: Artificial
> 99 <220> FEATURE: ← Same errors
> 99 <223> OTHER INFORMATION: ←
> 99 <400> 10
100 cagaatcagt aagattatca tcatagtctt ccgcttcttc 40
103 <210> SEQ ID NO: 11
104 <211> LENGTH: 38
105 <212> TYPE: DNA
106 <213> ORGANISM: Artificial
> 108 <220> FEATURE: ← Same error

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003
TIME: 17:34:11

Input Set : A:\Sequence Listing A66.txt
Output Set: N:\CRF4\12112003\J721997.raw

> 108 <223> OTHER INFORMATION:

> 108 <400> 11

109 ggtcagggttt gatgatgacg actctccttc ctttatcc

38

112 <210> SEQ ID NO: 12

113 <211> LENGTH: 38

114 <212> TYPE: DNA

115 <213> ORGANISM: Artificial

> 117 <220> FEATURE:

> 117 <223> OTHER INFORMATION:

> 117 <400> 12

118 ggataaagga aggagagtcg tcacatcaa acctgacc

38

121 <210> SEQ ID NO: 13

122 <211> LENGTH: 38

123 <212> TYPE: DNA

124 <213> ORGANISM: Artificial

> 126 <220> FEATURE:

> 126 <223> OTHER INFORMATION:

> 126 <400> 13

127 cccttagtcc tcgccccctc tgacagaagt tataaaaag

38

130 <210> SEQ ID NO: 14

131 <211> LENGTH: 38

132 <212> TYPE: DNA

133 <213> ORGANISM: Artificial

> 135 <220> FEATURE:

> 135 <223> OTHER INFORMATION:

> 135 <400> 14

136 cttttataac ttctgtcaga gggggcgagg actaaggg

38

139 <210> SEQ ID NO: 15

140 <211> LENGTH: 41

141 <212> TYPE: DNA

142 <213> ORGANISM: Artificial

> 144 <220> FEATURE:

> 144 <223> OTHER INFORMATION:

> 144 <400> 15

145 gtcgattta tggcatacac agatgttacc tttaagactc g

41

148 <210> SEQ ID NO: 16

149 <211> LENGTH: 41

150 <212> TYPE: DNA

151 <213> ORGANISM: Artificial

> 153 <220> FEATURE:

> 153 <223> OTHER INFORMATION:

> 153 <400> 16

154 cgagtcttaa aggtaacatc tgtgtatgcc ataaatcgga c

41

157 <210> SEQ ID NO: 17

158 <211> LENGTH: 37

159 <212> TYPE: DNA

160 <213> ORGANISM: Artificial

> 162 <220> FEATURE:

> 162 <223> OTHER INFORMATION:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003
TIME: 17:34:11

Input Set : A:\Sequence Listing A66.txt
Output Set: N:\CRF4\12112003\J721997.raw

> 162 <400> 17
163 cctttaagac tcgtaaagct attcagcatg aatcagg 37
166 <210> SEQ ID NO: 18
167 <211> LENGTH: 37
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial
> 171 <220> FEATURE: ← Same errors
> 171 <223> OTHER INFORMATION: ←
> 171 <400> 18
172 cctgattcat gctgaatagc tttacgagtc ttaaagg 37
175 <210> SEQ ID NO: 19
176 <211> LENGTH: 46
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial
> 180 <220> FEATURE: ← Same errors
> 180 <223> OTHER INFORMATION: ←
> 180 <400> 19
181 cacactgttg attatattta agaataaagc aagcagacca tataac 46
184 <210> SEQ ID NO: 20
185 <211> LENGTH: 46
186 <212> TYPE: DNA
187 <213> ORGANISM: Artificial
> 189 <220> FEATURE: ← Same errors
> 189 <223> OTHER INFORMATION: ←
> 189 <400> 20
190 gttatatggt ctgcttgctt tattcttaaa tataatcaac agtgtg 46
193 <210> SEQ ID NO: 21
194 <211> LENGTH: 40
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial
> 198 <220> FEATURE: ← Same errors
> 198 <223> OTHER INFORMATION: ←
> 198 <400> 21
199 ccctcaaggga atcactgatg tctctccttt gtattcaagg 40
202 <210> SEQ ID NO: 22
203 <211> LENGTH: 40
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial
> 207 <220> FEATURE: ← Same errors
> 207 <223> OTHER INFORMATION: ←
> 207 <400> 22
208 ccttgaatac aaaggagaga catcagtgat tccgtgaggg 40
211 <210> SEQ ID NO: 23
212 <211> LENGTH: 38
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial
> 216 <220> FEATURE: ← Same errors
> 216 <223> OTHER INFORMATION: ←
> 216 <400> 23

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003

TIME: 17:34:11

Input Set : A:\Sequence Listing A66.txt

Output Set: N:\CRF4\12112003\J721997.raw

217 gatgtccgtc ctttgtattc agggagatta ccaaaagg 38
220 <210> SEQ ID NO: 24
221 <211> LENGTH: 38
222 <212> TYPE: DNA
223 <213> ORGANISM: Artificial
> 225 <220> FEATURE: ← same errors
> 225 <223> OTHER INFORMATION: ←
225 <400> 24
226 ccttttggtg atctccctga atacaaagga cggacatc 38
229 <210> SEQ ID NO: 25
230 <211> LENGTH: 36
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial
> 234 <220> FEATURE: ← same errors
> 234 <223> OTHER INFORMATION: ←
234 <400> 25
235 ctgtatttga tgagaaccaa agctggtacc tcacag 36
238 <210> SEQ ID NO: 26
239 <211> LENGTH: 36
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial
> 243 <220> FEATURE: ← same errors
> 243 <223> OTHER INFORMATION: ←
243 <400> 26
244 ctgtgaggta ccagctttgg ttctcatcaa atacag 36
247 <210> SEQ ID NO: 27
248 <211> LENGTH: 30
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial
> 252 <220> FEATURE: ← same errors
> 252 <223> OTHER INFORMATION: ←
252 <400> 27
253 ctccccaatc cagatggagt gcagcttgag 30
256 <210> SEQ ID NO: 28
257 <211> LENGTH: 30
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial
> 261 <220> FEATURE: ← same errors
> 261 <223> OTHER INFORMATION: ←
261 <400> 28
262 ctcaagctgc actccatctg gattggggag 30
265 <210> SEQ ID NO: 29
266 <211> LENGTH: 32
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial
> 270 <220> FEATURE: ← same errors
> 270 <223> OTHER INFORMATION: ←
270 <400> 29
271 cagctggagt gcagcttcag gatccagat tc

32
The type of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003
TIME: 17:34:12

Input Set : A:\Sequence Listing A66.txt
Output Set: N:\CRF4\12112003\J721997.raw

valid <213> Response:

of "Artificial" only as "<213> Organism" response is incomplete,
1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
#:28,29,30,31,32

of <220> Feature(NEW RULES): *Error Explanation:*
ence(s) are missing the <220> Feature and associated headings.
of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"
Unknown". Please explain source of genetic material in <220> to <223>
tion (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32)
c.1.823 of new Rules)

#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
#:28,29,30,31,32

VERIFICATION SUMMARY

DATE: 12/16/2003

PATENT APPLICATION: US/10/721,997

TIME: 17:34:12

Input Set : A:\Sequence Listing A66.txt

Output Set: N:\CRF4\12112003\J721997.raw

M:270 C: Current Application Number differs, Replaced Current Application No
M:271 C: Current Filing Date differs, Replaced Current Filing Date
8 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:1, <213> ORGANISM:Artificial
8 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213> ORGANISM:Artificial
8 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:18
7 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:2, <213> ORGANISM:Artificial
7 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:2, <213> ORGANISM:Artificial
7 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:2,Line#:27
6 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:3, <213> ORGANISM:Artificial
6 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:3, <213> ORGANISM:Artificial
6 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:36
5 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:4, <213> ORGANISM:Artificial
5 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:4, <213> ORGANISM:Artificial
5 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:45
4 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:5, <213> ORGANISM:Artificial
4 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:5, <213> ORGANISM:Artificial
4 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:54
3 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:6, <213> ORGANISM:Artificial
3 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:6, <213> ORGANISM:Artificial
3 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:6,Line#:63
2 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:7, <213> ORGANISM:Artificial
2 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:7, <213> ORGANISM:Artificial
2 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:72
1 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:8, <213> ORGANISM:Artificial
1 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:8, <213> ORGANISM:Artificial
1 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:8,Line#:81
0 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:9, <213> ORGANISM:Artificial
0 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:9, <213> ORGANISM:Artificial
0 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:90
9 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:10, <213> ORGANISM:Artificial
9 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:10, <213> ORGANISM:Artificial
9 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:10,Line#:99
08 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:11, <213> ORGANISM:Artificial
08 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:11, <213> ORGANISM:Artificial
08 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:108
17 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:12, <213> ORGANISM:Artificial
17 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:12, <213> ORGANISM:Artificial
17 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:12,Line#:117
26 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:13, <213> ORGANISM:Artificial
26 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:13, <213> ORGANISM:Artificial
26 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:126
35 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:14, <213> ORGANISM:Artificial
35 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:14, <213> ORGANISM:Artificial
35 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:14,Line#:135
14 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:15, <213> ORGANISM:Artificial
14 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:15, <213> ORGANISM:Artificial
14 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:144
13 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:16, <213> ORGANISM:Artificial

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/721,997

DATE: 12/16/2003

TIME: 17:34:12

Input Set : A:\Sequence Listing A66.txt

Output Set: N:\CRF4\12112003\J721997.raw

53 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213> ORGANISM:Artificia
53 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:153
62 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:17, <213> ORGANISM:Artificia
62 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:17, <213> ORGANISM:Artificia